

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) Equipment for manufacturing a soot preform, comprising a reaction vessel, a burner that generates glass particulates, and a starting rod on the tip of or around which said glass particulates are deposited in said reaction vessel, said equipment being further equipped with a partition board which is provided in part of the space around a soot preform in said reaction vessel such that said space is separated into an upper and lower part, an exhaust port is provided below said partition board in the side wall of said reaction vessel, and said burner is positioned in the space below said partition board, wherein said partition board is configured for translation up and down within said reaction vessel and placement at one of a plurality of positions along said reaction vessel.

2. (Allowable, Currently Amended in Independent Form) Equipment for manufacturing a soot preform ~~as defined in Claim 1~~, comprising a reaction vessel, a burner that generates glass particulates, and a starting rod on the tip of or around which said glass particulates are deposited in said reaction vessel, said equipment being further equipped with a partition board which is provided in part of the space around a soot preform in said reaction vessel such that said space is separated into an upper and lower part, an exhaust port is provided below said partition board in the side wall of said reaction vessel, and said burner is positioned in the space below said partition board, wherein the interval between said partition board and said exhaust port is 100 to 400 mm.

3. (Original) Equipment for manufacturing a soot preform as defined in Claim 1, wherein a hole for the passage of said soot preform is provided in said partition board such that the gap between said partition board and said soot preform is 10 to 80 mm.

4. (Allowed) Equipment for manufacturing a soot preform, comprising a reaction vessel, a burner that generates glass particulates, and a starting rod on which the glass particulates are deposited, said equipment being further equipped with a partition board which is provided in part of the space around a soot preform in said reaction vessel such that the space is separated into an upper and lower part, an exhaust port is provided below said partition board in the side wall of said reaction vessel, and said burner is positioned in the space below said partition board, wherein said partition board is suspended by sling members from an upper position of said reaction vessel such that said partition board is movable up and down.

5. (Original) Equipment for manufacturing a soot preform as defined in Claim 1, wherein said partition board is made of one or more materials selected from the group consisting of nickel, quartz, and silicone carbide.

6. (Original) Equipment for manufacturing a soot preform as defined in Claim 1, wherein an air inlet is provided at a position opposite to said exhaust port below said partition board, in the wall of said reaction vessel.

7. (Currently Amended) A method for manufacturing a soot preform by depositing glass particulates in a reaction vessel, which are generated by hydrolysis reaction caused by

combustion gas and raw material gas supplied to a burner provided in said reaction vessel, on the tip of or around a starting rod while turning said starting rod around its axis and drawing it up, said reaction vessel having a partition board provided in part of the space between said soot preform and the inner wall of said reaction vessel at a position above an exhaust port and said burner which are provided in the wall of said reaction vessel such that said space is separated into the upper and lower parts, wherein said partition board is configured for translation up and down within said reaction vessel and placement at one of a plurality of positions along said reaction vessel.

8. (Allowed, Currently Amended) A method for manufacturing a soot preform comprising:

providing a reaction vessel comprising a partition board provided between a soot preform disposed in said reaction vessel and an inner wall of said reaction vessel, said partition ~~panel~~ board being disposed between about 100 to 400 mm above an exhaust port provided in the wall of said reaction vessel so as to separate the reaction vessel into an upper part and a lower part, said lower part comprising a burner,

supplying combustion gas and raw material gas to said lower part of said reaction vessel, using said burner to combust said combustion gas and raw material gas to produce a hydrolysis reaction,

depositing glass particulates generated by said hydrolysis reaction on the tip of or around a starting rod while turning said starting rod around its axis and drawing it up,

exhausting combustion products comprising non-deposited glass particulates and any non-combusted combustion gas and raw material through said exhaust port.

9. (Allowed) Equipment for manufacturing a soot preform, comprising a reaction vessel, a burner that generates glass particulates from a supplied combustion gas and raw material gas, and a starting rod on the tip of or around which said glass particulates are deposited in said reaction vessel, said equipment being further equipped with a partition board which is provided in part of the space around a soot preform in said reaction vessel such that said space is separated into an upper and lower part, an exhaust port is provided below said partition board in the side wall of said reaction vessel, and said burner is positioned in the space below said partition board, wherein an interval between said partition board and said exhaust port is 100 to 400 mm.

10. (Allowed) Equipment for manufacturing a soot preform as defined in claim 9, wherein a hole for the passage of said soot preform is provided in said partition board such that the gap between said partition board and said soot preform is 10 to 80 mm.

11. (Allowed) Equipment for manufacturing a soot preform as defined in Claim 9, wherein a hole having a predetermined fixed diameter is provided in said partition board to permit the vertical translation of said soot preform therethrough, said predetermined fixed diameter being selected such that the gap between said partition board and an outermost diameter of said soot preform is between about 10 to 80 mm.

12. (Allowed) Equipment for manufacturing a soot preform as defined in Claim 9, wherein an air inlet is provided at a position substantially opposite to said exhaust port below said partition board, in the wall of said reaction vessel.

13. (Allowed) Equipment for manufacturing a soot preform, comprising a reaction vessel, a burner that generates glass particulates, and a starting rod on which the glass particulates are deposited, said equipment being further equipped with a partition board which is provided in part of the space around a soot preform in said reaction vessel such that the space is separated into an upper and lower part, an exhaust port is provided below said partition board in the side wall of said reaction vessel, and said burner is positioned in the space below said partition board, wherein said partition board is configured for translation up and down within said reaction vessel over a predetermined interval.

14. (Allowed) Equipment for manufacturing a soot preform in accord with claim 13, wherein said predetermined interval comprises at least a first position about 100 mm from said exhaust port and a second position about 400 mm from said exhaust port.